

PART B - FEE(S) TRANSMITTAL

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CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

24319 7590 10/04/2004

LSI LOGIC CORPORATION
 1621 BARBER LANE
 MS: D-106 LEGAL
 MILPITAS, CA 95035

10/21/2004 6SAYAS12 00000085 122252 10676934

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Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

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I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (703) 746-4000, on the date indicated below.

Connie del Castillo	(Depositor's name)
<i>Connie del Castillo</i>	(Signature)
10/20/04	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,934	09/30/2003	Byung-Sung Kwak	02-5624	7850

TITLE OF INVENTION: PROCESS FOR REDUCING IMPURITY LEVELS, STRESS, AND RESISTIVITY, AND INCREASING GRAIN SIZE OF COPPER FILLER IN TRENCHES AND VIAS OF INTEGRATED CIRCUIT STRUCTURES TO ENHANCE ELECTRICAL PERFORMANCE OF COPPER FILLER

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1370	\$0	\$1370	01/04/2005

EXAMINER	ART UNIT	CLASS-SUBCLASS
PHAM, THANH V	2823	438-672000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).	2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.	John P. Taylor
<input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.	2.	
<input type="checkbox"/> "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.	3.	

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

LSI Logic Corporation

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Milpitas, CA

Please check the appropriate assignee category or categories (will not be printed on the patent): Individual Corporation or other private group entity Government

4a. The following fee(s) are enclosed:

- Issue Fee
- Publication Fee (No small entity discount permitted)
- Advance Order - # of Copies _____

4b. Payment of Fee(s):

- A check in the amount of the fee(s) is enclosed.
- Payment by credit card. Form PTO-2038 is attached.
- The Director is hereby authorized to charge the required fee(s), or credit any overpayment, to Deposit Account Number 12-2252 (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

- b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature

TLR

Date

20 Oct 04

Typed or printed name

Timothy Croll

Registration No. 36,771

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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15:25

LSI LOGIC LEGAL IP → 917037464000

NO. 174 Q001

FAX

LSI Logic Corporation
Legal Department - IP
1621 Barber Lane, MS D-106
Milpitas, CA 95036

Date October 20, 2004Number of pages including cover sheet 5**To: US PTO, Mail Stop Issue Fee**Fax No. 703-746-4000

Phone No. _____

CC: _____

From: Connie del Castillo**Intellectual Property Paralegal**Telephone No. (408) 433-7191Fax No. (408) 433-7460**REMARKS:** Urgent For your review Reply ASAP Please commentApplication Number: 10/676,934Filing date: September 30, 2003First named inventor: Byung-Sung Kwak et al.Attorney docket number: 02-5624

Transmitted herewith for filing via facsimile:

- Fee Transmittal, PTO/SB/17 (in duplicate)
- Part B – Fee(s) Transmittal PTOL-85 (in duplicate)

Pursuant to 37 C.F.R. 1.8, I hereby certify that this correspondence is being transmitted by facsimile to the U.S. Patent and Trademark Office on the date indicated below:

Oct 20, 2004Connie del Castillo

Date

Connie del Castillo

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PAGE 1/5 * RCVD AT 10/20/2004 6:28:23 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/0 * DNIS:7464000 * CSID:408 433 7460 * DURATION (mm:ss):02:32

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FEE TRANSMITTAL

Patent Fees are subject to annual revision on October 1.

These are the fees effective October 1, 1997.

Small Entity payments must be supported by a small entity statement, otherwise large entity fees must be paid. See Forms PTO/SB/09-12.

See 37 C.F.R. 1.27 and 1.28.

1370 -

TOTAL AMOUNT OF PAYMENT **(\$1336.00)**

Complete if Known	
Application Number	10/676,934
Filing Date	September-30, 2003
First Named Inventor	Byung-Sung Kwak
Group Art Unit	2823
Examiner Name	Thanh J. Pham
Attorney Docket No.	/02-5624

METHOD OF PAYMENT (check one)		FEE CALCULATION (continued)																																																																																																																																																																																											
<p>1. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any over payment to:</p> <p>Deposit Account Number 12-2252</p> <p>Deposit Account Number LSI LOGIC CORPORATION</p> <p><input checked="" type="checkbox"/> Charge Any Additional Fee required Under 37 C.F.R. 1.18 or the Mailing of the Notice of</p> <p><input checked="" type="checkbox"/> Charge the Issue Fee Set in 37 C.F.R. 1.18 of the Mailing of the Notice of</p>		<p>3. ADDITIONAL FEES</p> <table border="1"> <thead> <tr> <th>Large Entity Fee Code (\$)</th> <th>Entity Fee (\$)</th> <th>Large Entity Fee Code (\$)</th> <th>Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>105</td><td>130</td><td>205</td><td>65</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>127</td><td>50</td><td>227</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet</td><td></td></tr> <tr><td>139</td><td>130</td><td>139</td><td>130</td><td>Non-English specification</td><td></td></tr> <tr><td>147</td><td>2,520</td><td>147</td><td>2,520</td><td>For filing request for reexamination</td><td></td></tr> <tr><td>112</td><td>920*</td><td>112</td><td>920</td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>113</td><td>1,840*</td><td>113</td><td>1,840*</td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>115</td><td>110</td><td>215</td><td>55</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>116</td><td>400</td><td>216</td><td>200</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>117</td><td>950</td><td>217</td><td>475</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>118</td><td>1,510</td><td>218</td><td>755</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>128</td><td>2,080</td><td>228</td><td>1,030</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>119</td><td>310</td><td>219</td><td>155</td><td>Notice of Appeal</td><td></td></tr> <tr><td>120</td><td>310</td><td>220</td><td>155</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>121</td><td>270</td><td>221</td><td>135</td><td>Request for oral hearing</td><td></td></tr> <tr><td>138</td><td>1,510</td><td>138</td><td>1,510</td><td>Petition to institute a public use proceeding</td><td></td></tr> <tr><td>140</td><td>110</td><td>240</td><td>55</td><td>Petition to revive - unavoidable</td><td></td></tr> <tr><td>141</td><td>1,320</td><td>241</td><td>680</td><td>Petition to revive - unintentional</td><td></td></tr> <tr><td>142</td><td>1,320</td><td>242</td><td>660</td><td>Utility issue fee (or reissue)</td><td>1370 -</td></tr> <tr><td>143</td><td>450</td><td>243</td><td>225</td><td>Design issue fee</td><td></td></tr> <tr><td>144</td><td>670</td><td>244</td><td>335</td><td>Plant issue fee</td><td></td></tr> <tr><td>122</td><td>130</td><td>122</td><td>130</td><td>Petitions to the Commissioner</td><td></td></tr> <tr><td>123</td><td>50</td><td>123</td><td>50</td><td>Petitions related to provisional application</td><td></td></tr> <tr><td>126</td><td>240</td><td>126</td><td>240</td><td>Submission of Information Disclosure Stmt</td><td></td></tr> <tr><td>581</td><td>40</td><td>581</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td><td></td></tr> <tr><td>146</td><td>790</td><td>246</td><td>395</td><td>Filing a submission after final rejection (37 CFR 1.129 (a))</td><td></td></tr> <tr><td>148</td><td>790</td><td>249</td><td>395</td><td>For each additional invention to be examined (37 CFR 1.129 (b))</td><td></td></tr> <tr><td colspan="2">Other fee (specify)</td><td colspan="4">PUBLICATION FE</td></tr> <tr><td colspan="2">Other fee (specify)</td><td colspan="4"></td></tr> <tr> <td colspan="2">SUBTOTAL (1) (\$0.00)</td> <td colspan="4">SUBTOTAL (3) (\$11336.00) 1370 -</td> </tr> <tr> <td colspan="4">*Reduced by Basic Filing Fee Paid</td> <td colspan="2"></td> </tr> </tbody> </table>		Large Entity Fee Code (\$)	Entity Fee (\$)	Large Entity Fee Code (\$)	Entity Fee (\$)	Fee Description	Fee Paid	105	130	205	65	Surcharge - late filing fee or oath		127	50	227	25	Surcharge - late provisional filing fee or cover sheet		139	130	139	130	Non-English specification		147	2,520	147	2,520	For filing request for reexamination		112	920*	112	920	Requesting publication of SIR prior to Examiner action		113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action		115	110	215	55	Extension for reply within first month		116	400	216	200	Extension for reply within second month		117	950	217	475	Extension for reply within third month		118	1,510	218	755	Extension for reply within fourth month		128	2,080	228	1,030	Extension for reply within fifth month		119	310	219	155	Notice of Appeal		120	310	220	155	Filing a brief in support of an appeal		121	270	221	135	Request for oral hearing		138	1,510	138	1,510	Petition to institute a public use proceeding		140	110	240	55	Petition to revive - unavoidable		141	1,320	241	680	Petition to revive - unintentional		142	1,320	242	660	Utility issue fee (or reissue)	1370 -	143	450	243	225	Design issue fee		144	670	244	335	Plant issue fee		122	130	122	130	Petitions to the Commissioner		123	50	123	50	Petitions related to provisional application		126	240	126	240	Submission of Information Disclosure Stmt		581	40	581	40	Recording each patent assignment per property (times number of properties)		146	790	246	395	Filing a submission after final rejection (37 CFR 1.129 (a))		148	790	249	395	For each additional invention to be examined (37 CFR 1.129 (b))		Other fee (specify)		PUBLICATION FE				Other fee (specify)						SUBTOTAL (1) (\$0.00)		SUBTOTAL (3) (\$11336.00) 1370 -				*Reduced by Basic Filing Fee Paid					
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